IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Assignee: **Arcaris, Inc.**

Inventors: **Carl Alexander Kamb, et al**

Application No: **09/259,155**

Filed: **February 26, 1999**

For: **PROCESS FOR IDENTIFICATION OF GENES, PERTURBAGENS AND CELLULAR TARGETS RELATING TO VIRAL GROWTH AND DISEASE**

Group Art Unit: 1655
Examiner: Jeffrey N. Fredman

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SUPPLEMENTAL PRELIMINARY AMENDMENT

Sir:

This is a preliminary amendment to **Application No. 09/259,155**. On February 18, 2000, the Examiner issued an Office Action, and on August 15, 2000 Applicant filed a Response and Amendment. Applicant's representative discussed the case with the Examiner on November 6, 2000. Claims 1-9, 11 and 13 are pending.

AMENDMENT

Please CANCEL claim 5.

Please AMEND the claims as follows:

1. (Twice Amended) A method for identifying a proteinaceous perturbagen that inhibits viral growth-related cell death, comprising the steps of:

(a) introducing a library of [perturbagen encoding] nucleic acids, each library member encoding a perturbagen within a scaffold structure, into a population of host cells;

(b) expressing the encoded proteinaceous perturbagens within said scaffold structure in said population of host cells;

(c) exposing said perturbagen-bearing host cell population to a virus;

(d) selecting for growth-proficient cells; and

(e) recovering from said growth-proficient cells a sublibrary of nucleic acids encoding perturbagens that confer inhibition of viral growth-related cell death.

2. (Reiterated) The method of claim 1, wherein said step of selecting for growth-proficient cells comprises detecting cells that are not productively infected with said virus.

3. (Reiterated) The method of claim 2, wherein said step of detection comprises detection of non-fluorescent cells.

4. (Reiterated) The method of claim 1, wherein said step of selecting for growth-proficient cells comprises a stringent selection for growth.

5. (Cancelled) [The method of claim 1, wherein said proteinaceous perturbagen if expressed in a scaffold.]

6. (Amended) The method of claim [5] 1, wherein said scaffold is non-fluorescing GFP.

7. (Reiterated) The method of claim 1 wherein said virus is selected from a group consisting of rhinvirus, reovirus, influenza virus, adenovirus, human immunodeficiency virus human papilloma virus, hepatitis virus and herpes virus.

8. (Reiterated) The method of claim 7 wherein said virus is human immunodeficiency virus.

9. (Amended; reiterated) A method for identifying a cell proliferation gene or gene fragment that inhibits viral growth-related cell death, comprising the steps of:

(a) introducing a library of putative cell proliferation genes or gene fragments into a population of host cells;

(b) expressing said library in said population of host cells;

(c) exposing said library-bearing host cell population to a virus;

(d) selecting for growth-proficient cells; and

(e) recovering from said growth-proficient cells a sublibrary of cell proliferation genes or gene fragments that confer inhibition of viral growth-related cell death.

11. (Amended; reiterated) A method for identifying a cellular target involved in viral growth within a cell, comprising the steps of:

(a) exposing in a protein interaction assay (i) a perturbagen obtained by the method of claim 1 to (ii) a population of putative cellular targets obtained from said growth-proficient cells; and

(b) identifying a cellular target that interacts with said perturbagen.

13. (Amended; reiterated) The method of claim 11, wherein said step of identifying comprises a yeast two-hybrid interaction assay.

CONCLUSION

Applicant requests that the Examiner enter and consider favorably the claims as amended and submitted herein.

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Respectfully submitted,

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